LISTING OF THE CLAIMS

1-31. (Canceled)

32. (Previously presented) A system for efficient drainage of the chest area in the region of the heart, comprising:

a source of vacuum at very high negative pressure greater than about 300 torr; and

a small caliber drainage tubing having a generally closed distal end and a connection to said source of vacuum downstream from said distal end, said drainage tubing having a plurality of holes of an effective size and shape selected to ensure a suction force communicated within the chest cavity to remove fluid but which is maintained insufficient to damage the tissues exposed in the chest area in the vicinity of said drainage tubing.

33. (Previously presented) A system for reducing cardiac tamponade by providing highly efficient drainage of the chest area in the region of the heart, comprising:

a source of vacuum at very high negative pressure greater than about 300 torr; and

a drainage tubing having a generally closed distal end and a connection to said source of vacuum downstream from said distal end, said drainage tubing having a plurality of holes of an effective size and shape selected to ensure a suction force communicated within the chest cavity to remove fluid but which is maintained insufficient to damage the tissues exposed in the chest area in the vicinity of said drainage tubing.

34. (Previously presented) A highly efficient drainage device for draining fluid from a body cavity, such as the chest, comprising:

a tube having a generally closed distal end and another end for connection with a source of very high negative pressure, said tube having a plurality of holes having an area greater than that of a circle with an area around one half of an internal diameter of the tube, said internal diameter of said tube being chosen to ensure a suction force communicated within the body cavity to remove fluid but which is maintained insufficient to damage the tissues exposed in the vicinity of said drainage tubing.

35. (Previously presented) The drainage device of claim 34 wherein said negative pressure is at least about 125 torr.

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36. (Previously presented) A drainage device for draining a body cavity, comprising:

a tube having a first and a second end, said first end adapted to be inserted into the body cavity and being effectively closed, and a tube wall,

a plurality of holes formed into said tube wall in an area of said tube that is intended to be inserted into the chest area,

a second end of said tube being adapted for receiving a source of vacuum, said source of vacuum being at a level of at least 300mm Hg,

said holes being of a size and quantity such that a suction force from any of said holes is insufficient to cause any significant injury to body tissue proximate a hole, while efficiently draining fluid from body cavity.

37. (Previously presented) The drainage device of claim 36 wherein said tube is of a small caliber, and wherein a largest hole is approximately circular in diameter with an effective diameter no greater than about one half of an internal diameter of said tube in the region of said holes.

38. (Previously presented) The drainage device of claim 37 wherein said effective diameter is about 1mm.

39. (Previously presented) The drainage device of claim 37 wherein said effective diameter is about 0.5mm.

40. (Previously presented) The drainage device of claim 36 wherein said hole size and vacuum level yield a force of about 0.4N at a hole.

41. (Previously presented) A system for efficient drainage of a body cavity, comprising:

a source of vacuum at very high pressure; and

a small caliber drainage tubing having a generally closed distal end and a connection to said source of vacuum downstream from said distal end, said drainage tubing having a plurality of holes of an effective size and shape selected to ensure a suction force communicated within the body cavity to remove fluid but which is maintained insufficient to damage the tissues exposed in the vicinity of said drainage tubing, wherein said hole size and number are selected to yield a force of about 0.4N at a hole.

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42. (Previously presented) The drainage system of claim 41 wherein said body cavity is the chest area in the region of the heart.

43. (Previously presented) A system for efficient drainage of a body cavity, comprising:

a source of vacuum at very high pressure; and

a small caliber drainage tubing having a generally closed distal end and a connection to said source of vacuum downstream from said distal end, said drainage tubing having a plurality of holes of an effective size and shape selected to ensure a suction force communicated within the body cavity to remove fluid but which is maintained insufficient to damage the tissues exposed in the vicinity of said drainage tubing, wherein said hole size and number are selected to yield a force of about that of capillary blood pressure.

44. (Currently amended) The drainage device of claim 36, wherein an outer diameter of the tube is in the range of 4 F to 15 F.

45. (Currently amended) The drainage device of claim 36, wherein an outer diameter of the tube is about 13 F.

46. (Previously presented) The drainage device of claim 36 wherein said hole size and vacuum level yield a force in the range of about 0.2N to 0.8N at a hole.

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